



### Reporting

Missouri law requires the well be registered with the Department of Natural Resources within 60 days after plugging an abandoned well. The department will review the registration record after it is submitted to ensure it meets Missouri Well Construction Rules. The landowner should submit the form if they plug the well themselves or the permitted contractor, if used, will submit the form.

If the record indicates the well has been properly plugged, a registration number will be sent to the landowner. The registration record and number are important to keep because lending institutions or local governmental bodies may require proof of proper plugging upon sale or refinancing of the property.

For a blank registration record contact the Missouri Department of Natural Resources' Wellhead Protection Section at 573-368-2165 or on the Web at [www.dnr.mo.gov/forms/index.html](http://www.dnr.mo.gov/forms/index.html).

### How do I find Abandoned Wells?

Looking around a property may help identify an abandoned well. Look for an obvious sign such as a pipe sticking out of the ground. The well casing is usually made of a steel or plastic pipe that is 2 to 6 inches in diameter. A concrete slab or manmade cover may be the sign of a pit where an abandoned well is located. Windmills are often located over abandoned wells or an old shed may be located over an old well house.

### Contact Us

If you have questions or concerns about plugging abandoned wells, contact:

#### **Missouri Department of Natural Resources**

##### **Wellhead Protection Section**

[www.dnr.mo.gov/env/wpp/wellhd/](http://www.dnr.mo.gov/env/wpp/wellhd/)

573-368-2165

573-368-2317 fax

P.O. Box 250, Rolla, MO 65402

### Additional Resources

#### **National Ground Water Association**

[www.ngwa.org](http://www.ngwa.org)

800-551-7379

#### **Missouri Water Well Association**

[www.wavecomputers.net/jsommer](http://www.wavecomputers.net/jsommer)

573-729-4830

#### **Missouri Department of Health**

##### **and Senior Services**

[www.dhss.mo.gov](http://www.dhss.mo.gov)

573-751-6400

#### **Water Systems Council**

[www.watersystems council.org](http://www.watersystems council.org)

202-625-4387

#### **Natural Resource Conservation Service**

[www.nrcs.usda.gov](http://www.nrcs.usda.gov)

573-876-0900



**Missouri Department  
of Natural Resources**  
Water Protection Program

# Plugging Your **ABANDONED WELL**



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of Natural Resources**  
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## Abandoned Wells

A water supply is as important today as ever, but many things have changed since the days of the hand-dug well. Cisterns and wells used decades ago may now pose a serious liability.

Whether hand-dug or drilled, all abandoned wells present hazards. Wells with wide openings pose a serious physical hazard, especially for small children and animals. Contaminants can also enter the groundwater in abandoned wells and pose a risk to new wells being drilled.

### Plugging Abandoned Wells

Plugging abandoned wells is the responsibility of the landowner. State regulations allow landowners to plug their own wells, but they must do so according to the rules for properly plugging abandoned wells. If the well depth, length of casing and water depth is known, the department can give you exact materials needed to plug the well properly. If unknown, however, a licensed well or pump contractor is recommended to ensure the work is done correctly. Improperly plugged abandoned wells can leave the aquifer open to possible contamination.

### Chlorinated Clean Fill Process.

Before beginning the plugging process, any water in the well should be chlorinated before the clean fill is added. Chlorinating prevents bacteria from entering the aquifer. This can be done by pouring ordinary household bleach into the well before the aggregate, or clean fill such as gravel, varied-sized agricultural lime, etc, is added. For most wells a gallon of bleach is sufficient. If there is no water in the well the clean fill should be chlorinated prior to putting it into the well.

## Types of Abandoned Wells

### Private Water Wells - Unconsolidated Material

Private water supply wells drilled in unconsolidated material, such as soil, clay or silt, are usually less than 6 inches in diameter, and may range in depth from 40 to 150 feet deep. The lower portion of the well contains a slotted pipe called a well screen, which allows water to enter the well. The remainder of the hole contains casing.

To plug these wells, remove the pump or any debris. Dig around the casing to 3 feet in depth and cut off the casing. Fill the well with chlorinated clean fill to a point 50 feet below the surface. Next, place the grout so it fills the upper 50 feet of casing and extends into the larger excavated area at least 1 foot. The remainder of the well should be filled with clay or clay-rich soil. Soil should be mounded at the top slightly and compacted to help offset settling.

### Private Water Wells - Bedrock

Private water supply wells drilled in bedrock usually have a casing that is 6 inches in diameter and may range in depth from 40 feet to 500 feet. The amount of well casing can vary widely depending on geology of the area and age of the well.

To plug these wells, remove the pump and any debris from the well, cut off the casing 3 feet below the surface and either chlorinate the water in the well or fill the well with chlorinated clean fill from the bottom of the well to 50 feet below the base of the casing. Grout is then used to fill the well from the top of the clean fill to within 2 feet of the surface. The remainder of the well should be filled with clay or clay-rich soil. Soil should be mounded slightly at the top and compacted to help offset settling.

### Hand-dug Wells

Hand-dug wells are commonly 3 to 6 feet in diameter, larger at the bottom than the top and may range in depth from 10 to 30 feet. They are usually lined with brick, concrete or field stone.

To plug these wells, carefully push in the upper few feet of the well lining and fill the well to within 3 feet of the surface with chlorinated clean fill. The remainder of the well should be filled with clay or clay-rich soil. Soil should be mounded slightly and compacted to help offset settling.

### Bored Wells

Bored wells were usually constructed with an auger, scoop or dragline and are the modern equivalent of an old hand-dug well.

To plug these wells, remove the pump and any debris from the well, cut off the casing 3 feet below the surface and fill the well from the bottom to the top with neat cement, bentonite grout or chipped bentonite. A licensed driller or pump installer is recommended when plugging bored wells.



Abandoned Well in Lawrence County